## Water Quality Team Meeting Notes

### April 12, 2005 NOAA Fisheries Offices, Portland, OR

#### 1. Greetings and Introductions.

Mark Schneider welcomed everyone to today's meeting, then led a round of introductions and a review of today's agenda. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these minutes should contact Kathy Ceballos at 503/230-5420.

#### 2. Winter TDG Monitoring.

Jim Adams said the purpose of this agenda item was to decide whether the fixed monitoring network should be arrayed for winter operation. We had agreed to begin monitoring the Bonneville tailwater at Cascade Island as a spot of compliance, while retiring the Warrendale gauge, he said. Then we discovered that, because of its location, the Cascade Island station doesn't adequately capture TDG below Bonneville because most of the powerhouse flow flows around it. Then came the Spring Creek Hatchery release, and the Corps decided to continue to monitor at Warrendale, because Cascade Island isn't adequately monitoring TDG from the flow through the corner collector. It turns out that Warrendale is also fairly representative of the TDG levels in the river at the Multnomah Creek chum spawning site, Adams explained.

Eventually, what the Corps decided was to monitor at Cascade Island once the spill season begins, and pull that monitor in August, after the spill season ends, Adams said. Warrendale will be installed immediately prior to the cessation of spill at Bonneville – the third or fourth week in August – and will operate until the end of chum emergence, some time in mid- to late May.

The question, with respect to winter monitoring, is which gauges need to be operating, Adams continued. The Lower Granite forebay and tailwater stations are operating year-'round, as are the Ice Harbor forebay and tailwater stations. There are two McNary forebay stations, as well as McNary tailrace. Then there's the Bonneville forebay gauge and the Warrendale gauge downstream. There is also a gauge operating in the Dworshak tailwater, Adams said. There are all of these wintertime gauges, and I

guess I was wondering whether the states feel that the Corps really needs to operate all of them, year-'round, said Adams. Should we reexamine the winter TDG monitoring network, and decide whether or not we really need all of those gauges?

Margaret Filardo noted that part of the reason for wintertime monitoring is that, in some years, there is a lot of TDG in the river during the wintertime. That's part of the reason why those stations operate year-'round, she said; any analysis of whether that should continue needs to include both the states' input and a look at multiple water years. Also, said Filardo, with respect to using Warrendale as a surrogate for TDG levels at Multnomah Creek, the salmon managers had requested that the Corps monitor TDG and water depth at the Multnomah Creek site in real-time. The Corps said it could not honor that request this year, but the salmon managers would like the Corps to consider funding real-time monitoring at Multnomah Creek in future years. We have no way of knowing, really, how closely TDG levels at Warrendale mimic those at Multnomah Creek; also, Warrendale give us no information on the depth of water over the redds at Multnomah Creek, she said.

Adams said the Corps has no plans to monitor water quality and depth anywhere except Warrendale in the future. Harkless noted that Dave Wills has promised to look into potential USFWS funding for the Multnomah Creek monitoring. Schneider suggested that it might make sense for the WQT to craft a work plan, laying out what questions the Multnomah Creek monitoring should be designed to answer. Adams said the Corps would be willing to discuss such a plan.

Schneider suggested that a WQT subgroup convene to discuss the questions such a monitoring effort would be designed to answer, its goals and objectives, and the technical and logistical details involved. Adams said that, again, the Corps is willing to entertain the idea of real-time monitoring at Multnomah Creek, but cautioned that the action agencies have only limited ability to control river elevations downstream of the lves Island complex. We need to get a realistic idea of how much control we have, he said; the answer may well be, not much.

Schneider said he will take the lead on organizing the Multnomah Creek subgroup meeting. Filardo and Adams agreed to participate, as did Joe Carroll. Filardo said she will also send out an email inviting subgroup participation from Wills and the states of Oregon and Washington. It also sounds as though we need to have some conversation with the states about what they feel is important and appropriate, in terms of wintertime TDG monitoring, Adams said.

# 3. SYSTDG Dissolved Gas Model, Practical Applications, Scheduling of Workshop #2.

Adams said last month's SYSTDG workshop went well; participation was higher than expected. We went through a lot of the theoretical and practical aspects of the

model, and I thought it was a good workshop, he said. We had planned to hold a second workshop this Thursday, but because spill hasn't really begun at Bonneville, and flows are still quite low, we probably want to postpone that until some time in May, Adams said. We have decided to try to hold the next SYSTDG workshop on the morning of May 10, starting at 9 am, with the WQT meeting in the afternoon, he said. In response to a question from Harkless, Adams said attendance would be worthwhile even for those who did not attend the first workshop.

#### 4. Implementation Team Long-Range Work Planning.

Harkless noted that, at its April 7 meeting, the Implementation Team briefly discussed the focus of future work plans for the WQT; John Palensky has developed a list of potential WQT work topics, but the IT didn't really have time to discuss it, she said. At today's meeting, Schneider distributed copies of Palensky's list; he said he will email the list to the entire WQT membership. This topic will be revisited at the May IT meeting; Harkless said she will put it on the agenda for the May WQT meeting as well.

#### 5. Review of Future WQT Meeting Topics.

Harkless noted that Dave Zimmer, Schneider, Stu McKenzie and Joe Carroll have developed a list, titled "Water Quality Team Suggested Future Topics". The list includes:

- Update on Lower Snake River temperature model (2000 BiOp RPA 143)
- Water quality concerns in the Lower Snake, other than TDG and temperature.
- Results of 2004 Lower Snake dams forebay temperature monitoring thermistor strings, temperature profiles, 2003-'05 results at other Columbia and Snake River dams, data repositories
- Results of the 3D temperature model in the McNary forebay
- Results of water quality characterization (RPA 39)
- Lower Granite pool 3D and 2D temperature model and related fish effects
- Dworshak inflow and in-reservoir temperature profiles
- Yakima River eutrophication study
- Aguatic growths in the Columbia River and could lead a discussion
- Lower Columbia River water quality management.

Carroll led a brief discussion of this list, adding a few details about the subcommittee's thinking on each item. It was agreed that the WQT will begin discussion of the Lower Snake-related topics – in particular, items 1, 3, 6 and 7 – at its June meeting. This agenda item will include both a status update and a discussion of the WQT's future Lower Snake-related work. With respect to Agenda Item 4, it was agreed to invite Mike Schneider and Steve Jewell to the May WQT meeting. Items 7, 8 9 and 10 will be discussed following the 2005 in-season management period. Adams suggested that the WQT look into whether there are water quality-related issues in the Clearwater

and Kootenai Rivers; it was agreed to add this to the list. It was also agreed to add a Hanford Reach update to an upcoming WQT meeting. It was further agreed not to tackle Willamette River water quality issues at this time. Schneider asked that the WQT membership send him any additional topics they would like to see added to this list.

#### 6. WQT 2006/2007 Work Plan.

Schneider distributed copies of a document titled "Water Quality Team Activities Related to Action Agencies' 2005-2007 Implementation Plan for the Updated Proposed Action and the 2004 BiOp" (Enc. D). My intent was simply to lay out the topics where, in my review of the Implementation Plan, I saw areas the WQT had already worked on, and areas where I felt the WQT ought to be involved, Schneider explained.

Schneider provided a brief overview of his future WQT activities list. With respect to Item 2 (The Dalles Dam spillway survival improvements – conduct second year of post-construction evaluation of the spillwall, including its effects on TDG), Adams observed that the Corps has concluded that there is no TDG issue associated with the spillwall. Jim Irish said Washington's Columbia River Initiative, through which up to 1 MAF of water would be removed from the Columbia annually, would be another topic worthy of WQT discussion – that could have a huge impact on what we're trying to do, if it ever makes it through the Washington governor's office, Irish said. He said he will provide Schneider with the CRI's website information for distribution to the other WQT members.

It sounds as though we have some good topics laid out through this summer, said Harkless, adding that she will put together a schedule showing when, over the next six months or so, these topics will be addressed.

#### 7. WQT Guidelines.

Harkless noted that the most recent draft of the WQT guidelines is now two years old; she asked whether the other WQT participants have had an opportunity to review the WQT guidelines. Given the relatively poor attendance at today's meeting, said Schneider, we should probably defer this topic to the May WQT agenda. It was so agreed.

#### 8. Next WQT Meeting Date.

The next Water Quality Team meeting was set for Tuesday, May 10 at the Corps' NW Division/Reservoir Control Center headquarters on NW Couch Street. Meeting summary prepared by Jeff Kuechle.